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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,553	11/25/2003	Surinder K. Batra	UNMC.63121.1	6633

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DANN, DORFMAN, HERRELL & SKILLMAN
1601 MARKET STREET
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PHILADELPHIA, PA 19103-2307

EXAMINER

LIETO, LOUIS D

ART UNIT	PAPER NUMBER
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1632

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,553

Applicant(s)

BATRA ET AL.

Examiner

Louis D. Lieto

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, 15-20, drawn to an isolated nucleic acid of SEQ ID NO: 1, a vector comprising the nucleic acid, and a host cell comprising the nucleic acid, classified in class 536, subclass 23.1.
- II. Claim 10, drawn to an oligonucleotide, which hybridizes with a protein translation initiation site in a nucleotide sequence encoding amino acids of SEQ ID NO:2, classified in class 536, subclass 23.1.
- III. Claim 11, drawn to an isolated PD2 protein, classified in class 530, subclass 350.
- IV. Claims 12-14, drawn to an antibody that binds to an isolated PD2 protein, classified in class 424, subclass 130.1.
- V. Claims 21-24, drawn to a host animal comprising SEQ ID NO: 1, drawn to 800, classified in class 8, subclass 8.
- VI. Claims 25-27, drawn to a method for screening a test compound in a host cell expressing a PD-2 encoding nucleic acid, classified in class 435, subclass 325.
- VII. Claim 28, drawn to a kit for detecting the presence of PD2 encoding nucleic acids in a sample, classified in class 425, subclass 288.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, and II are patentably distinct inventions for the following reasons. In the instant case the different invention of group I is drawn to an isolated nucleic acid of SEQ ID NO:

Art Unit: 1632

I, a vector comprising the nucleic acid, and a host cell comprising the nucleic acid, while the invention of group III is drawn to an oligonucleotide, which hybridizes with a protein translation initiation site in a nucleotide sequence encoding amino acids of SEQ ID NO:2. The invention of group I is drawn to a patentably distinct class of nucleic acids that are different in structure and function than the oligonucleotide of Group II.

Inventions III, and IV are patentably distinct inventions for the following reasons. In the instant case the different invention of group I is drawn to an isolated PD2 protein, while the invention of group IV is drawn to an antibody that binds to an isolated PD2 protein. The invention of group III is drawn to a protein that can be made without the antibody of group IV and used in the study of pancreatic cancer without requiring a binding antibody. Further the antibody of Group IV can be used in a method other than to bind to the protein of group III, such as a blocking agent for Fc receptors.

Inventions V, VI and VII are patentably distinct inventions for the following reasons. In the instant case the different inventions of groups V is drawn to a host animal comprising SEQ ID NO: 1, while the invention of group VI is drawn to a method for screening a test compound in a host cell expressing a PD-2 encoding nucleic acid, and the invention of group VII is drawn to a kit for detecting the presence of PD2 encoding nucleic acids in a sample. The animal of group V cannot be made using the inventions of groups VI and VII, and can be in other methods other than to produce host cells for the invention of group VI, such as the *in vitro* study of pancreatic cancer. Further, the method of screening of group VI does not require the kit of group VII. The kit of group VII, can be used to detect a nucleic acid encoding PD in an a-cellular test sample, and does not require the host animal or cell of groups V and VI.

Art Unit: 1632

Inventions I,II; III,IV; and V-VII are patentably distinct sets of inventions for the following reasons. In the instant case the different invention of groups I and II are drawn to nucleic acids, while the inventions of groups III and IV are drawn to an isolated protein and an antibody, the invention of group V is drawn to an animal, the invention of group VI is drawn to a screening method and the invention of group VII is drawn to a kit. The nucleic acids are not required to make or use the isolated protein of group III and the antibody of group IV, since both can be made using a protein synthesizer. The isolated protein of group III and the antibody of group IV are not required for use in the animal of group V, the method of screening of group VI or the kit of group VII. Finally the nucleotides of groups I and II cannot be made with the methods of groups V-VI and can be used for patentably distinct uses other than the inventions of groups V-VI, such as a blocking agent for southern blot assays.

Furthermore, searching the inventions of groups I-VI together would impose a serious search burden. In the instant case, the search of a nucleic acid, a protein, an antibody, a host animal, a method of screening a test compound and PCR kit are not co-extensive. The inventions of groups I-VI have a separate status in the art as shown by their different sub-classifications. As such, it would be burdensome to search the inventions of groups I -VI together.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Lou Lieto whose telephone number is (571) 272-2932. The examiner can normally be reached on Monday-Friday, 9am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Patent applicants with problems or questions regarding electronic images that


Art Unit: 1632

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Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Dr. Louis D. Lieto
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